Doc Code: AP.PRE.REQ PTO/SB/33 (07-05) Approved for use through xx/xx/200x. OMB 0651-00xx U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of no persons are quired to respond to a collection of information unless it displays a valid OMB control number. Docket Number (Optional) PRE-APPEAL BRIEF REQUEST FOR REVIEW SCS-540-569 Application Number Filed 10/539.016 June 16, 2005 First Named Inventor Levers Art Unit Examiner N. D'Aniello 1793 Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. I am the

Applicant/Inventor Signature Assignee of record of the entire interest. See 37 Stanley C. Spooner C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) Typed or printed name Attorney or agent of record 27,393 (Reg. No.) 703-816-4028 Requester's telephone number Attorney or agent acting under 37CFR 1.34. July 6, 2009 Registration number if acting under 37 C.F.R. § 1,34 _ Date NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.* *Total of 1 form/s are submitted.

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STATEMENT OF ARGUMENTS IN SUPPORT OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following listing of clear errors in the Examiner's rejection and his failure to identify essential elements necessary for a *prima facie* basis of rejection is responsive to the Final Rejection mailed February 4, 2009 (Paper No. 20090121).

Error #1. The Examiner improperly ignores positively recited limitations in each of independent claims 1, 21, 27 and 35

In all independent claims, there is recited the requirement of "the open structure including spaced apart elements separated by gaps." There is also required an "intermediate member . . . positioned between the shaped surface and the component."

The claim requirement that the open structure be comprised of "spaced apart elements" is not in doubt. The common meaning of the word "spaced" is that the elements must be separated by a space and accordingly are not in contact with each other. Although perhaps redundant, the claim limitation also requires that the elements be "separated by gaps." The common definition of "gap" in *Webster's Ninth New Collegiate Dictionary* is "a break in a barrier (as a wall, hedge, or line of military defense)." The second definition of "gap" as a verb is "to make an opening in" These two aspects of the "open structure" give the claimed structure its name, i.e., an "open structure." As will be seen, the Examiner appears to ignore this specifically recited claim limitation in determining that the independent claims are either anticipated or obvious in view of Haas and/or Bornschlegl.

Each of the independent claims also requires "an intermediate member . . . positioned between the shaped surface and the component." The plain language of these words is that there must be an intermediate member between the open structure and the shaped surface. Each of the claims goes on to specify a required level of stiffness of the intermediate member because it must "deform substantially to the shape of said notional smooth surface, but suffers substantially no local

deformation in regions of the intermediate member that bridge the gaps." As will be seen, when properly construed, this "intermediate member" limitation is simply not disclosed or rendered obvious by the Bornschlegl reference.

The Examiner's apparent failure to properly construe "spaced apart elements separated by gaps" and the recited "intermediate member" with its recited limitations constitutes reversible error and consideration thereof by the Panel is respectfully requested.

Error #2. The Examiner fails to support his allegation that the Haas reference discloses either "spaced apart elements" or "gaps"

Beginning on page 2 and continuing to page 3 of the Final Official Action, the Examiner contends that the Haas structure is "defined by an open structure, which is separated by the gaps between the pins (see figure 4B element 150 represents a gap." However, element 150, that the Examiner refers to, is the "external chamfers or radii 150 (FIG. 4B)." As can be seen in Haas, there is no spacing between any of the pins, although the chamfers or radii on the corners of the pins permit gaps 150. However, even if the Examiner considers there to be gaps between non-adjacent elements, it is clear that each element is in full contact with the next element. Thus, the elements cannot possibly be separated or "spaced apart" as required by the claims.

The Examiner also suggests that Figures 5 and 6 show the pins in more detail and show them in "spaced apart" form. However, the Examiner's attention is directed to column 6, lines 47-53 in which it is explained that each of Figures 5 and 6 is a "exploded perspective view." By definition, an exploded view illustrates components which are spaced apart or "exploded" for ease of description contrary to their normal orientation. Figures 5 and 6 merely illustrate the arrangement in Figure 4B which specifically depicts the array "in side-by-side relationship." Thus, the Examiner's reliance upon Figures 5 and 6 which are clearly specified as only teaching spaces in an "exploded view" is misplaced.

Again, Applicant notes that the gaps 150 referenced by the Examiner do not meet the common definition of "gap," i.e., "a break in a barrier," and therefore no gaps are disclosed in Haas. Even if there were gaps, the elements are still not "spaced apart" as clearly shown in Figure 4B and Figures 5 and 6 showing exploded views do not aid the Examiner's position.

Accordingly, the Haas reference does not show all claimed limitation and therefore cannot support an anticipation rejection or a *prima facie* case of obviousness with respect to the independent claims or claims dependent thereon.

Error #3. The Examiner fails to support his allegation that certain independent claims are obvious over the Bornschlegl/Haas combination

The Bornschlegl reference clearly fails to teach any "intermediate member" as discussed in Applicant's claims. In fact, as previously noted, Bornschlegl requires that the shaped surface bear directly on the aircraft component and thus would lead one of ordinary skill in the art away from using an intermediate member.

As discussed above, Haas, which does disclose what the Examiner considers to be an intermediate member, specifically teaches that each of the elements **not be** "spaced apart" or "separated by gaps."

Furthermore, is noted that if the translating pins of Haas were separated by gaps as disclosed in Bornschlegl, then Haas would be inoperative because they would not "have planar sides which prevent their rotation by the restraining action of adjacent translating pins and with the retaining sidewalls of the pin array." (Column 1, lines 55-58). In other words, if the Haas pins were actually separated as contended by the Examiner, the pins would be able to rotate and therefore the turning of the lead screw 10 under the pin would not result in adjustable vertical movement of the pin but instead the pin would merely rotate about its axis. So quite clearly, if the pins of Haas were combined with the spacing of Bornschlegl, they would not be adjustable as disclosed in Haas.

Thus, Haas cannot possibly teach the required limitations of the independent claims and in fact would clearly lead one of ordinary skill in the art away from the claimed combination.

Error #4. The Examiner fails to provide the required "analysis" of his rationale for combining elements from the Haas and Bornschlegl references

As required by the Supreme Court in *KSR*, it is incumbent upon the Examiner to provide an explicit "analysis" as to his rationale for picking and choosing elements from the various references and then combining them in the manner of Applicant's independent claims. As noted above, the Examiner appears to have ignored the fact that Haas does not teach spaced apart elements and indeed if the elements were spaced apart, they would not be adjustable (they would merely rotate themselves as the underlying jack screw is turned). While Haas does teach what the Examiner contends is an intermediate member, this is not present in Bornschlegl and Bornschlegl, while teaching spaced apart elements, does not teach the use of an intermediate member. Unfortunately, the Examiner has not provided any indication as to how or why Bornschlegl's "teaching away" from using an intermediate member and Haas's "teaching away" from separation from spaced apart elements and separation by gaps would not discourage one from combining references.

The failure to provide an explicit "analysis" is an indication that the Examiner has failed to establish a *prima facie* case of obviousness.

Error #5. The Examiner ignores the facts that both references would "teach away" from the claimed invention thereby rebutting any prima facie case of obviousness

As noted above, the Haas reference not just suggests, but requires each of the pins to be in contact with its neighbor or it would not operate (no vertical adjustment of the pins by the lead screws). The Bornschlegl reference suggests there is no need for an intermediate member.

Neither reference suggests an intermediate member that is "sufficiently stiff" as required by the claims.

It is well settled that, even if a *prima facie* case of obviousness is set out by the Examiner, it is fully and completely rebutted if it can be shown that the prior art "teaches away" from the claimed combination. As noted above, both Haas and Bornschlegl teach away from the claim, thereby rebutting any *prima facie* case of obviousness.

SUMMARY

The Examiner has apparently failed to properly construe the "open structure including spaced apart elements separated by gaps" and the "intermediate" member having the specified "stiffness." The Examiner misconstrues the Haas reference which not only doesn't teach "spaced apart" elements, but actually required no spacing between elements for the device to operate. Even with the combination of Haas and Bornschlagl the claimed combination of elements is missing. The Examiner fails to provide the required "analysis" as to why one would combine features from the prior art references. Finally, even if a *prima facie* case of obviousness was set out, the Haas teaching away from "spaced apart" rebuts the case of obviousness.

As a result of the above, there is simply no support for the rejection of Applicants' independent claims 1, 21, 27 and 35 or claims dependent thereon under 35 USC §102 and/or §103. Applicant respectfully requests that the Pre-Appeal Panel find that the application is allowed on the existing claims and prosecution on the merits should be closed.